

REMARKS

By this amendment, Applicants have amended the specification to eliminate the informalities noted by the Examiner in numbered section 2 of the Office Action. However, the word “height” at page 10, line 17 is correct and has not been amended to --thickness-- as suggested by the Examiner. With respect to the amendment of “Patent Literature 1” to --JP-63-190669--, it is noted this document has been considered by the Examiner and a copy of the first page and partial translation are attached.

Applicants have also added new claims 11-24 to further define their invention. Claims 11 and 18 are similar to claim 1, but claim 11 recites that the liquid fuel is a methanol aqueous solution or an ethanol aqueous solution and recites that the material of a low frictional coefficient not dissolving out into the liquid fuel is diamond-like carbon and is coated on at least one of the sliding surfaces. Claim 12 recites that the liquid fuel chamber is one that stores liquid fuel and that the material of the low frictional coefficient not dissolving out is diamond-like carbon and is coated on the at least one of the sliding surfaces. Claims 12-17 correspond to claims 2-5, 9 and 10, respectively, but depend from claim 11. Claims 19-24 correspond to claims 2-5, 9 and 10, respectively, but depend from claim 12.

The Examiner has objected to the drawings under 37 CFR 1.83(a) as not showing the coating set forth in claim 6. This objection is traversed.

Claim 6 recites that the material not dissolving out into the liquid fuel is coated onto the at least one sliding surface. Thus, the feature recited in claim 6 relates to a coated article. Such a feature is one in which drawings are usually considered necessary for the understanding of the invention under 35 U.S.C. 113, first sentence. See, Manual of Patent Examining Procedure (MPEP) 601.01(f). Therefore, it is

submitted the drawings do not have to show this feature of the invention. Accordingly, reconsideration and withdrawal of the objection to the drawings are requested.

In view of the foregoing amendments to the specification, reconsideration and withdrawal of the objection to the disclosure are requested.

Claims 1-4, 9 and 10 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,979,652 to Saulle. Applicants traverse this rejection and request reconsideration thereof.

The present invention relates to a fuel container for a fuel cell. The fuel container has a container body, which is provided with a liquid fuel chamber for storage of liquid fuel and a discharge means accommodating chamber for accommodating means for discharging a liquid fuel. A partition wall member is disposed slidably in the interior of the container body. The partition wall member partitions the interior of the container body into the liquid fuel chamber and the discharge means accommodating chamber. At least one of the sliding surfaces of the container body in the partition wall member contains a material of a low frictional coefficient not dissolving out into the liquid fuel. This achieves a positive slidability of the partition wall member and the fuel container without mixing any impurities into the liquid fuel.

The Saulle patent discloses a charging valve for containers of fluid products. This patent discloses that the container includes two chambers 3 and 4 with a piston 10 located with fins 12 at the bottom of internal chamber 3. It is disclosed that the piston is air tight along the chamber and stops material going through the area below 16. However, despite the allegation in numbered section 4 of the Office Action that this patent discloses a partition wall member containing a material of a low frictional coefficient not dissolving out into the liquid fuel, the Saulle patent does not disclose the material of which the piston 10, fins 12 or the tubular body 2 defining the internal

chamber 3 is made. The only discussion of materials for the chamber is for the ring-shape body 5 or sheath of elastic material, which is disclosed to be, for example, rubber, Indian rubber, plastic and the like. No material of low frictional coefficient not dissolving out into the liquid fuel is disclosed, especially for the piston 10, fins 12 or tubular body 2.

Accordingly the Saulle patent does not disclose the presently claimed invention.

Claim 5 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Saulle in view of WO 03/043112 A1 to Deinzer et al. Applicants traverse this rejection and request reconsideration thereof.

The Examiner has cited the Deinzer et al. publication as disclosing the use of a valve that is spring urged in the direction of a nozzle outlet. However, clearly nothing in Deinzer et al. would have remedied the basic deficiencies noted above with respect to Saulle. Accordingly, claim 5 is patentable over the proposed combination of documents, at least for the reasons noted above.

Claims 6 and 7 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Saulle et al. in view of U.S. Patent Application Publication 2003/001988 A1 to Gupta. Applicants traverse this rejection and request reconsideration thereof.

The deficiencies of Saulle are noted above. That is, rather than teaching that at least one of the sliding surfaces of the container body in the partition wall member should contain a material of a low frictional coefficient, the Saulle patent only teaches that the piston should be air tight along the chamber.

In the Gupta patent, the piston 200 and its fins 300 sealingly engage with the inner wall 122 of the container 100 by being activated by propellant pressure so that they extend toward and sealingly engage the inner wall of the container. In such a configuration, it is disclosed that low friction materials can be used for the thin contact

surfaces and/or inner wall. However, the piston 10 of Saulle does not have a construction with fins that extend under pressure. Accordingly, it is submitted there would have been no reason for one of ordinary skill in the art to have combined the teachings of Gupta with those of Saulle. In fact, noting that Saulle requires that the piston be air tight along the chamber and that it discloses the use of elastic materials for another member (the ring-shape body 5) that must tightly fit other members (see column 2, lines 52-61), it is submitted one of ordinary skill in the art would not have had any reason to use low friction materials for the piston 10.

For the foregoing reasons, it is submitted claims 6 and 7 are patentable over the proposed combination of documents.

Claims 6 and 8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Saulle in view of U.S. Patent No. 5,033,940 to Baumann. Applicants traverse this rejection and request reconsideration thereof.

The Examiner has cited the Baumann patent as disclosing coating a piston surface with a diamond-like carbon. However, the piston in Baumann is a piston in a reciprocating high-pressure compressor. It is submitted the teachings in Baumann relating to a compressor would not have provided any reason to modify the piston of the container of Saulle.

Accordingly, claims 6-8 are patentable over the proposed combination of documents.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance of all of the claims now in the application are requested.

Please charge any shortage in the fees due in connection with the filing of this paper, including excess claim fees, to Deposit Account No. 01-2135 (520.46388X00), and please credit any excess fees to such deposit account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

/Alan E. Schiavelli/

Alan E. Schiavelli

Registration No. 32,087

AES/at

Telephone: (703) 312-6600